



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/390,289	09/03/1999	JEFFREY S. DUGAN	709.36924X00	6666

20457 7590 07/16/2003

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 07/16/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/390,289		Applicant(s) DUGAN ET AL.	
Examiner Jenna-Leigh Befumo		Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,11-21,24-30,32-54,62,64-69 and 72-81 is/are pending in the application.
- 4a) Of the above claim(s) 32-54 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 81 is/are allowed.
- 6) ☒ Claim(s) 9,11-21,24-30,62,64-69 and 72-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 16, 2003 has been entered.

Response to Amendment

2. Amendment C, submitted as Paper No. 15 on May 16, 2003, has been entered. Claim 10 has been cancelled. Claims 9, 30, 67, and 77 have been amended and claims 79 – 81 have been added. Therefore, the pending claims are 9, 11 – 21, 24 – 30, 32 – 54, 62, 64 – 69, and 72 – 81. Claims 32 – 54 are withdrawn from consideration as being drawn to a nonelected invention.

3. Amendment C is sufficient to overcome the objection to claim 77 set forth in section 8 of the previous Office Action.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 9, 11 – 21, 24 – 30, 62, 64 – 69, and 72 – 80 are rejected under 35 U.S.C. 102(b) as being anticipated by Hwang (4,514,455).

The new limitations with respect to the size of the multicomponent fiber being at most 1 denier and the split fiber having a size between 0.01 denier and 1 denier are anticipated by Hwang since Hwang teaches that the light fibers have a size of 1 to 3 dtex or 0.9 to 2.7 denier

Art Unit: 1771

(column 3, lines 56 – 57). Thus, the final product produced by Hwang would have fibers with a linear density of between 0.01 and 1 denier, and have binder from the binder fibers at the cross-over points.

Response to Arguments

6. Applicant's arguments filed May 16, 2003 have been fully considered but they are not persuasive. The Applicant argues that Hwang fails to anticipate the rejections since Hwang does not teach making the fibers by the same process limitations, as those recited in the claim. However, as set forth previously the Applicant is claiming the product, and not the process, so the patentability of the product is based on the structure of the final product. Further, the process would only be given weight after it has been shown that the process produces a structurally different product than the prior art. The Applicant's statement that the final product produced by this method is a structurally different product is not sufficient evidence to establish that a structurally different product is produced (Amendment C, page 14). The Examiner does agree that the process limitations should be given weight if they produce a structurally different product, but the Applicant has provided no such evidence to verify that a different product is produced or to show how the products are different. What is the structural difference between the Applicant's invention and the prior art? The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). Therefore, only the structure of the final product is given weight in the product claims. Thus, the prior art needs to teach a nonwoven having at least one set of fibers less than 1 denier in size, and are bonded together at the cross-over points by a

Art Unit: 1771

binder material, which is substantially only at the cross-over points. As set forth previously, Hwang teaches these features.

Additionally, the Applicant argues that the prior art wouldn't have features such as higher surface area, smaller pore size, increased strength and increased softness. However, the features upon which applicant relies are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, if these are structural differences produced by the product the Applicant should provide evidence to show this and claim these features.

7. The Applicant also argues, that the Examiner has not met the burden of showing that the binder in Hwang would be substantially at the cross-over points (Amendment C, pages 14 – 15). However, the Examiner feels that this burden has been met for numerous reasons. First, Hwang specifically teaches that the binder fibers are heated so that they lose their identity and coalesce at the cross-over points of the other fibers (column 4, lines 5 – 10). Therefore, the fibers are no longer in the form of a fiber and as stated by Hwang coalesce at the cross-over points. Second, this is, in fact, the same method that the Applicant teaches for collecting the binder material at the cross-over points. While the Applicant argues that Hwang does not teach this limitation, since conditions such as time and temperature of heating are not taught (Amendment C, page 15), it is noted that these features are not taught by the Applicant either. So either the Applicant's specification is non-enabling because the Applicant does not teach what heating temperatures and time periods are needed to form the binder at the cross-over points, or this information is well known in the art and would be readily understood by one with ordinary skill

Art Unit: 1771

in the art. It is the Examiner's position that one of ordinary skill in the art would readily know how to manipulate the binder so that the binder material would locate at the cross-over points (as disclosed by Hwang). As further evidence to this fact, the Examiner provided the teaching of Marshall, Peoples, and Geary, in the previous Office Action. These references were not submitted as part of the rejection, but instead to show that it is known how to form binder at the cross-over points by one of ordinary skill in the art. Therefore, the teaching by Hwang that the binder should be located at the cross-over points is a sufficient teaching to produce a final product with the binder located substantially at the cross-over points. If the Applicant feels that this is not the case, and that the prior art needs to teach time and temperature limitations to teach how to produce binder at the cross-over points, then the Examiner feels that this argument would imply that the Applicant's own specification is flawed, since it also fails to teach the time or temperature limitation required to produce the binder material at the cross-over points.

Further, it is unclear how the Applicant feels the prior art does not teach that the binder is at the cross-over points. Hwang explicitly says the binder fibers are not longer in fiber form and the binder collects at the cross-over points. While the Examiner will stipulate that the binder is not only at the cross-over points, it is not required to be by the claim. The claim states that the binder is "substantially only at the cross-over points". Further, if the binder didn't collect at the cross-over points, how would the fibers be bonded together? Since Hwang teaches that binder collects at the cross-over points, the Examiner feels that the recited limitation is met.

8. Further, the Applicant argues that Hwang does not teach the claimed product since the product of Hwang uses three different types of fibers in the nonwoven fabric, the nonwoven fabric is attached to an additional layer, the nonwoven fabric is heated after it is attached to an

Art Unit: 1771

additional layer, and the fibers taught by Hwang are relatively large compared to the fibers claimed by the Applicant (Amendment C, pages 12 – 13). First, the claims do not exclude using three different fibers. In fact the claim states that there are “at least” two type of fibers. This would include three types of fibers where one is a binder fiber, and the final product has two different fibers bonded together by the third fiber component. Second, the claims do not exclude that the nonwoven fabric is attached to an additional layer. So regardless of when Hwang heats the binder fiber or if the nonwoven is attached to an additional layer, the nonwoven would still meet the limitations of the product as claimed. Third, the fibers taught by Hwang are not relatively large as compared to the Applicant’s product. The Applicant claims fibers which are less than 1 denier and Hwang teaches the light fibers can be 1 dtex to 3 dtex, or 0.9 to 2.7 denier. Thus, the ranges overlap. Hence the fibers are the same size. While the additional fibers used by Hwang might be larger than the fiber size claimed, the Applicant doesn’t exclude additional fibers which are larger than 1 denier. Therefore, the limitations of the claimed product are met and the additional components taught by Hwang are not excluded by the claims. Thus, the rejections are maintained.

Allowable Subject Matter

9. Claim 81 is allowed.
10. The following is a statement of reasons for the indication of allowable subject matter: Claims 81 is allowable since the prior art fails to teach producing yarns with binder material located at the cross-over points of the fibers.

Conclusion

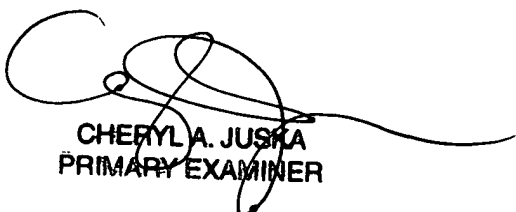
Art Unit: 1771

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
July 10, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER